AMENDMENTS TO THE CLAIMS:

Claims 1-20 (canceled)

21. (Currently Amended) An integrated circuit comprising:

at least one metal layer comprising a plurality of conductors to interconnect one or more points on the integrated circuit;

wherein at least one conductor comprises at least three wires, the at least one conductor being ~~a plurality of wires deposed in different directions, the wire comprising a continuous conducting segment deposed in different directions, the wire comprising~~ a continuous conducting segment deposed in a single effective direction measured relative to the boundaries of the integrated circuit, wherein each of the at least three wires is a continuous conducting segment deposed in a single direction measured relative to the boundaries of the integrated circuit; and

wherein, for each ~~connector~~ conductor that comprises ~~more than two~~ at least three wires, at least 30 percent of the at least three wires ~~in the conductor~~ are deposed in different directions.

22. (Currently Amended) The integrated circuit as set forth in claim 21, wherein at least one of the different directions is ~~the direction comprises~~ a Manhattan direction.

23. (Currently Amended) The integrated circuit as set forth in claim 21, wherein at least one of the different directions is ~~the direction comprises~~ a diagonal direction.

24. (Original) The integrated circuit as set forth in claim 23, wherein the diagonal direction comprises an octalinear direction.

25. (Original) The integrated circuit as set forth in claim 23, wherein the diagonal direction comprises a hexalinear direction.

26. (Currently Amended) An integrated circuit comprising:

at least one metal layer comprising at least two pairs of conductors to interconnect one or more points on the integrated circuit, wherein a conductor comprises one or more wires, each ~~and a~~ wire ~~comprises~~ being a continuous segment deposed in a single direction, each pair of conductors comprising:

a first wire deposed in a Manhattan direction relative to the boundaries of the integrated circuit, the first wire comprising a first wire length including first and second ends; and

a second wire deposed in a diagonal direction relative to the boundaries of the integrated circuit, the second wire comprising a second wire length including first and second ends, the first end of the second wire being coupled to the second end of the first wire; [[and]]

wherein, an effective direction of the pairs of conductors comprises an angle, A, measured relative to the boundaries of the integrated circuit, the angle A being defined by the expression Tan A = Y/X~~,~~; and

wherein, Y comprises a line segment with a distance starting from the second end of the second wire in the last conductor pair and ending at an intersection with a line segment propagated from the first end of the first wire and in the direction of the first wire, and X

comprises a distance, measured in the direction of the first wire, starting from the first end of the first wire and ending with the intersection of the Y line segment.

27. (Original) The integrated circuit as set forth in claim 26, wherein the Manhattan direction for the first wire comprises a horizontal direction.

28. (Original) The integrated circuit as set forth in claim 26, wherein the Manhattan direction for the first wire comprises a vertical direction.

29. (Original) The integrated circuit as set forth in claim 26, wherein the diagonal direction comprises a plus 45 degree direction for the second wire.

30. (Original) The integrated circuit as set forth in claim 26, wherein the diagonal direction comprises a minus 45 degree direction for the second wire.

31. (Original) The integrated circuit as set forth in claim 26, wherein the diagonal direction comprises a 60 degree direction for the second wire.

32. (Original) The integrated circuit as set forth in claim 26, wherein the diagonal direction comprises a minus 60 degree direction for the second wire.

33. (Original) The integrated circuit as set forth in claim 26, wherein the diagonal direction comprises a plus 120 degree direction for the second wire.

34. (Original) The integrated circuit as set forth in claim 26, wherein the diagonal direction comprises a minus 30 degree direction for the second wire.

35. (Currently Amended) A method for simulating any wiring direction in an integrated circuit using wires deposed in diagonal and Manhattan directions, the method comprising the steps of:

providing at least one metal layer comprising at least two pairs of conductors to interconnect one or more points on ~~the~~ an integrated circuit, wherein a conductor comprises one or more wires and a wire comprises a continuous segment deposed in a single direction;

for each pair of conductors:

deposing a first wire in a Manhattan direction relative to the boundaries of the integrated circuit, the first wire comprising a first wire length including first and second ends;

deposing a second wire in a diagonal direction relative to the boundaries of the integrated circuit, the second wire comprising a second wire length including first and second ends; and

coupling the first end of the second wire to the second end of the first wire; ~~and~~

wherein, an effective direction of the pairs of conductors comprises an angle, A, measured relative to the boundaries of the integrated circuit, defined by the expression Tan A = Y/X~~,~~; and

wherein, Y comprises a line segment with a distance starting from the second end of the second wire in the last conductor pair and ending at an intersection with a line segment propagated from the first end of the first wire and in the direction of the first wire, and X

comprises a distance, measured in the direction of the first wire, starting from the first end of the first wire and ending with the intersection of the Y line segment.

Claims 36-47 (canceled)